



# CAP166

## Volume and Duration model

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Developing a workplan

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# Aims

**Establish consistent understanding of Working Group Alternative Proposal**

**Explore areas that require further consideration by the Working Group**

- ◆ Differentiate the elements that have already been covered by Working Group discussions from those that require further consideration

**Develop a workplan which will allow full consideration of the Working Group Alternative Proposal in the timescales**

# Agenda

**High level design concept**

**Auction process**

**Derivation of prices**

- ◆ Long-term
- ◆ Short-term

**Product definition**

**Other issues**

# High Level Design Concept

## **Annual multi-round auction in which Users bid an entry access capacity requirement based on capacity (MW) and duration (years)**

NG calculate nodal price based on LRMC and ex ante forecast of SRMC (if applicable)

Users have the option to:

- Accept price and fix (effectively cap) for the duration of the bid
- Reduce capacity and / or duration in future auction round

All parties would have option to overrun (and would face applicable charge)

# Auction process 1

## User bids capacity (MW) and duration (years)

- ◆ Opening bid in first round represents maximum capacity and longest duration
- ◆ Users can only reduce capacity and/or duration in future rounds
- ◆ Bids do not need to be for subsequent years, but no option to bid for years not included in first round bid

## NG calculates price [see later]

## User has opportunity to accept or reduce capacity and/or duration prior to next round

- ◆ How much time is required between rounds?
- ◆ Projects that accept do not take part in future rounds
- ◆ Accepted prices can be changed (reduced) as a result of changes to bids made by other Users

# Auction process 2

## Auction closure

- ◆ Auction closes when there are no significant changes, for example:
  - Aggregate User bids do not differ by >5% capacity between rounds
  - Aggregate User bids do not reduce by a fixed de-minimis capacity volume of 10MW
  - Bids do not differ in duration by > 2 years
- ◆ Closure process set ex ante to be clear to participants

## Issues for consideration

- ◆ Detailed process arrangements
  - Including auction timescales and duration
  - Closure Methodology

# Derivation of prices

## For volume up to baseline (+incremental) capacity

- ◆ All Users pay long-term charge

## If volume is greater than baseline (+incremental) capacity

- ◆ All Users pay
  - Long-term charge
    - For volume up to baseline (+incremental) capacity
  - Short-term charge
    - For volume above baseline (+incremental) capacity

# Derivation of prices: Long-term 1

## Long-term prices would include

- ◆ Local charge (£/kW)
- ◆ Wider charge (£/kW)
- ◆ Residual (£/kW or £/kWh)

**Long-term charge would only apply when associated reinforcements have been completed**

# Derivation of prices: Long-term 2

## Issues for consideration

- ◆ Nature of wider charges
  - LRMC derived from ICRP transport & tariff model?
    - What is the associated process?
  - Treatment of planned reinforcements
  - Treatment of baseline capacity
    - Tariff from ICRP transport & tariff model applicable to volumes up to baseline (+incremental) only?
    - How would this be achieved? Boundary by boundary?
    - How should capacities greater than baseline (+incremental) be handled?
  - Treatment of load factor
    - Annual capacity factors (e.g. 50% of 8760 hours)?
  
- ◆ What is the appropriate lead-time for long-term access?
  - Fixed (e.g. 4 years) [similar to CAP164 original]
  - Project specific backstop [similar to CAP164 working group alternative amendment]
  - Transmission consents + fixed period
  
- ◆ Revenue recovery
  - Residual charge
    - Fixed or variable?

# Derivation of prices: Short-term 1

## Where aggregate bids for capacity > baseline (+incremental), users required to pay SRMC

- ◆ Only until incremental reinforcements have been completed
  - Note previous lead-time issues
- ◆ Short-run costs for capacity above baseline (+incremental) only
  - Constraint costs caused by outages etc. continue to be recovered (flat) by BSUoS

## Short-run costs difficult to forecast

- ◆ Options for consideration:
  - Fixed ex ante based on forecast bid offer spread
  - Contract for differences (one-way or two-way) with strike prices based on forecast bid offer spread
  - As above with caps and collars
  - Known ex ante charges based on forecast BM bid offer spread with an indexation mechanism
    - Perhaps based on GBSO incentive mechanism
  - Explore interaction with treatment of buy-back [see later]
- ◆ Options may not be mutually exclusive

# Derivation of prices: Short-term 2

## Issues for consideration

- ◆ Determination of appropriate short-term price
  - Marginal or average, etc.
  - £/kW or £/kWh
  - Appropriate treatment of location
- ◆ Determination of appropriate chargeable volume
  - To ensure constraints due to outages are recovered from (flat) BSUoS charges
- ◆ Commercial and contractual framework in relation to the liability to pay charges
  - Including framework for any CfDs
- ◆ Implications of inter-trips (or other operating restrictions) on development of short-term costs
- ◆ Revenue recovery

# Product definition

## Contractual framework

- ◆ Including nature of offer, etc.

## Liabilities and securities

- ◆ Pre-commissioning
- ◆ Post-commissioning

## Buy-back

- ◆ As developed for WGAA1 & 2
  - LCN
    - As now
  - Access rights secured via auction
    - Due to LCN – refund
    - Constraint on wider system – compensation in BM
- ◆ User bids volume/duration and buy-back cap
  - How would this be factored into ex ante forecast of short-term costs?
  - Should this be reflected back in Users price?

# Other issues

## Design variation connections

- ◆ Treatment of design variation connections

## Incentives

- ◆ Consideration of the appropriate SO and TO incentives

# Meeting dates and timescales

## Working Group Meeting dates

- ◆ Wednesday 10 December
- ◆ Monday 15 December
- ◆ Friday 9 January 2009
- ◆ Thursday 15 January 2009
- ◆ Thursday 22 January 2009
- ◆ Tuesday 27 January 2009

## Submission of Working Group Report to CUSC Panel

- ◆ Wednesday 28 January 2009 [subject to CUSC Panel permission]

## CUSC Panel to consider Working Group Report

- ◆ Friday 31 January 2009

# Summary of issues 1

## Timing between rounds

## Definition of closure rules

## Definition of auction timescales and duration

## LRMC tariffs

- ◆ Associated process for deriving from ICRP transport and tariff model

## LRMC baselines

- ◆ Capacity into LRMC process
- ◆ Treatment of planned reinforcements

## Treatment of plant load factors

## Lead-time for long-term access

# Summary of issues 2

## Revenue recovery

## SRMC tariffs

## Liabilities and securities

- ◆ Pre-commissioning
- ◆ Post-commissioning

## Buy-back

## Design variation connections

## SO/TO incentives